

Sub
Act

WD_I, WD_{II} and WD_{III}, respectively, as shown in FIG. 15. The arbitrations I, II, and III produce Memory Grant signals MG_I, MG_I, and MG_{III}, respectively, as indicated, for the registers 6204_I, 6204_{II} and 6204_{III}, respectively, of filter 6202₂ of logic section 5010₂, as shown in FIG. 15.

5 Thus, it should be noted that while each one of the registers 7002₁, 7002₂, 7002₃, of filters 6002₁, 6002₂ (FIGS. 19), are fed the same data from registers 7000₁, 7000₂, and 7000₃, respectively, because of the time skew shown in FIG. 18, such registers 7002₁, 7002₂, 7002₃, may not store the data which is in registers 7000₁, 7000₂, and 7000₃, respectively. However, the majority gates MG 7004₁-7004₃ will produce the same data according to FIG. 17.

10 Therefore, the three arbitrations I, II, and III of arbitration logic 6004₂ will receive the same data (i.e., the data produced by the majority gates MG 7004₁-7004₃) thereby providing coherency (i.e., synchronization) to the arbitrations I, II, and III even though the arbitrations are operating independently of each other.

Other embodiments are within the spirit and scope of the appended claims.

15 What is claimed is:

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Sub 2

1. A method for checking the Cyclic Redundancy Cycle (CRC) of DATA, such DATA comprising a series of data words terminating in a CRC portion, such method comprising:

checking the CRC of the data words while delaying the DATA from passing to an output;

corrupting the delayed DATA if such checking determines a CRC error, such corruption of the DATA being performed prior to the data words pass to said output.

2. The method recited in claim 1 wherein the corrupting comprising corrupting a parity byte of such data words.

3. A system, comprising;

a source of DATA, such DATA comprising a series of bytes each byte having a parity bit, such series of bytes terminating in a Cyclic Redundancy Cycle (CRC) portion associated with the series of bytes of the DATA;

a source of a the CRC portion;

a CRC checker fed by the series of bytes of the DATA and the source of the CRC portion, for determining a CRC from the seines of bytes and for comparing such determined CRC with the CRC fed by the CRC source;

a delay fed by the series of bytes and the parity bits thereof;

a selector having a first input thereof fed by the parity bits and a second input thereof fed by the complement of such parity bits, such selector coupling the first input thereof to an output of such selector when the determined CRC is the same as the CRC fed by the CRC source and for coupling the second input thereof to the output when the determined CRC is different from the CRC fed by the CRC source, the output of the selector providing an appended parity bit for the data bytes after such data bytes pass through the delay.

4. A system, comprising;

a source of DATA, such DATA comprising a series of data words, each data word having a parity bit, each data word in the series being associated with a clock pulse,

4 such series of data words terminating in a Cyclic Redundancy Cycle (CRC) portion
5 associated with the series of bytes of the DATA, such CRC portion comprising a
6 predetermined number of CRC words, each one of such CRC words being associated with
7 one of the clock pulses ;

8 a source of a the CRC portion;

9 a CRC checker fed by the series of data words and the source of the CRC
10 portion, for determining a CRC from the series of data words and for comparing such
11 determined CRC with the CRC fed by the CRC source;

12 a delay fed by the series of DATA, such delay delaying the DATA by at least the
13 number of CRC words;

14 a selector having a first input thereof fed by the parity bits and a second input thereof
15 fed by the complement of such parity bits, such selector coupling the first input thereof to an
16 output of such selector when the determined CRC is the same as the CRC fed by the CRC
17 source and for coupling the second input thereof to the output when the determined CRC is
18 different from the CRC fed by the CRC source, the output of the selector providing an
19 appended parity bit for the data words after such DATA has passed through the delay.

1 5. The system recited in claim 4 including a second selector, such second selector
2 having a first input fed the DATA and a second input fed by the output of the first-mentioned
3 selector, such second selector coupling either the first input thereof or the second input
4 thereof to an output of the second selector selectively in accordance with a control signal fed
5 to such second selector.